

Docket No. 3875-4138US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): David McKinnon and Jane Dixon
Group Art Unit: TBA
Serial No.: 09/786,108
Examiner: TBA
Filed: 2/27/01
For: Mammalian ELK Potassium Channel Genes

EXPRESS MAIL CERTIFICATE

Express Mail Label No.: EL 762 624 518US

Date of Deposit: June 18, 2001


I hereby certify that the following attached paper(s) and/or fee

1. Response;
2. Copy of Notice to Missing Parts;
3. Executed Combined Declaration and Power of Attorney
4. Recordation Cover Sheet;
5. Executed Assignment;
6. Statement Under 37 CFR 1.821(f);
7. Paper copy of Sequence Listing;
8. Disc copy of Sequence Listing;
9. Return Postcard.

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

F. Garcia

(Typed or printed name of person mailing papers(s) and/or fee)


(Signature of person mailing paper(s) and/or fee)

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, NY 10154-0053
(212) 758-4800 Telephone
(212) 751-6849 Facsimile

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): David McKinnon and Jane Dixon
Serial No.: 09/786,108
Filed: February 27, 2001
For: Mammalian ELK Potassium Channel Genes
Group Art Unit: TBA
Examiner: TBA

Commissioner for Patents
Washington, D.C. 20231

RESPONSE

Sir:

This is in response to the Notification of Missing Parts Requirement under 35 U.S.C. 371.

Enclosed herewith is a signed Combined Declaration and Power of Attorney . The signed Combined Declaration and Power of Attorney now correctly identifies PCT Application No. PCT/US99/19902 filed August 31, 1999.

Also enclosed is a paper and disc copy of the corrected Sequence Listing. SEQ ID NOs. 5 and 6 are now amended and correctly identified as PRT sequences. Please replace the originally filed Sequence Listing. The STIC Examiner pointed out that SEQ ID NOs. 5 and 6 are in error. The sequences are now correctly identified.

Support for the amendment is to be found in the specification at page 43, lines 10 and 11.

Attached is a copy of the Notice as required.

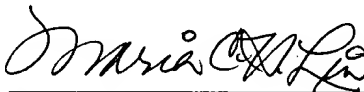
REMARKS

The Commissioner is hereby authorized to charge any additional fees which may be required for the timely consideration of this amendment under 37 C.F.R. §§ 1.16 and 1.17, or credit any overpayment to Deposit Account No. 13-4500, Order No. 3875-4138US1.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: June 18, 2001

By:



Maria C.H. Lin
Registration No. 29, 323

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, NY 10154-0053
(212) 758-4800 Telephone
(212) 751-6849 Facsimile

**COMBINED DECLARATION AND POWER OF ATTORNEY FOR
ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,
DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

MAMMALIAN ELK POTASSIUM CHANNEL GENES

the specification of which

- a. ☐ is attached hereto
- b. ☒ was filed on February 27, 2001 as application Serial No. 09/786,108 and was amended on . (if applicable).

PCT FILED APPLICATION ENTERING NATIONAL STAGE

- c. ☒ was described and claimed in International Application No. PCT/US99/19902 filed on August 31, 1999 and as amended on . (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby specify the following as the correspondence address to which all communications about this application are to be directed:

SEND CORRESPONDENCE TO: Maria C.H. Lin
MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, N.Y. 10154

DIRECT TELEPHONE CALLS TO: 212-415-8745

- ☒ I hereby claim foreign priority benefits under Title 35, United States Code § 119 (a)-(d) or under § 365(b) of any foreign application(s) for patent or inventor's certificate or under § 365(a) of any PCT international application(s) designating at least one country other than the U.S. listed below and also have identified below such foreign application(s) for patent or inventor's certificate or such PCT international application(s) filed by me on the same subject matter having a filing date within twelve (12) months before that of the application on which priority is claimed:

- ☒ The attached 35 U.S.C. § 119 claim for priority for the application(s) listed below forms a part of this declaration.

Country/PCT	Application Number	Date of filing (day, month, yr)	Date of issue (day, month, yr)	Priority Claimed
PCT	US99/19902	31 August 1999		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> Y <input type="checkbox"/> N

- ☒ I hereby claim the benefit under 35 U.S.C. § 119(e) of any U.S. provisional application(s) listed below.

Provisional Application No.	Date of filing (day, month, yr)
60/098,413	31 August 1998

ADDITIONAL STATEMENTS FOR DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART OR PCT INTERNATIONAL APPLICATION(S DESIGNATING THE U.S.)

- I hereby claim the benefit under Title 35, United States Code § 120 of any United States application(s) or under § 365(c) of any PCT international application(s) designating the U.S. listed below.

US/PCT Application Serial No.	Filing Date	Status (patented, pending, abandoned)/ U.S. application no. assigned (For PCT)

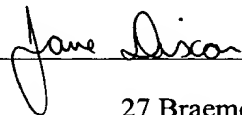
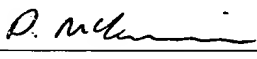
US/PCT Application Serial No.	Filing Date	Status (patented, pending, abandoned)/ U.S. application no. assigned (For PCT)

- ☐ In this continuation-in-part application, insofar as the subject matter of any of the claims of this application is not disclosed in the above listed prior United States or PCT international application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or Imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorneys and/or agents with full power of substitution and revocation, to prosecute this application, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith: John C. Vassil (Reg. No. 19,098), Alfred P. Ewert (Reg. No. 19,887), David H. Pfeffer (Reg. No. 19,825), Harry C. Marcus (Reg. No. 22,390), Robert E. Paulson (Reg. No. 21,046), Stephen R. Smith (Reg. No. 22,615), Kurt E. Richter (Reg. No. 24,052), J. Robert Dailey (Reg. No. 27,434), Eugene Moroz (Reg. No. 25,237), John F. Sweeney (Reg. No. 27,471), Arnold I. Rady (Reg. No. 26,601), Christopher A. Hughes (Reg. No. 26,914), William S. Feiler (Reg. No. 26,728), Joseph A. Calvaruso (Reg. No. 28,287), James W. Gould (Reg. No. 28,859), Richard C. Komson (Reg. No. 27,913), Israel Blum (Reg. No. 26,710), Bartholomew Verdirame (Reg. No. 28,483), Maria C.H. Lin (Reg. No. 29,323), Joseph A. DeGirolamo (Reg. No. 28,595), Michael P. Dougherty (Reg. No. 32,730), Seth J. Atlas (Reg. No. 32,454), Andrew M. Riddles (Reg. No. 31,657), Bruce D. DeRenzi (Reg. No. 33,676), Mark J. Abate (Reg. No. 32,527), John T. Gallagher (Reg. No. 35,516), Steven F. Meyer (Reg. No. 35,613) and Kenneth H. Sonnenfeld (Reg. No. 33,285), Tony V. Pezzano (Reg. No. 38,271), Andrea L. Wayda (Reg. 43,979), Walter G. Hanchuk (Reg. No. 35,179), John W. Osborne (Reg. No. 36,231), and Robert K. Goethals (Reg. No. 36,813) of Morgan & Finnegan, L.L.P. whose address is: 345 Park Avenue, New York, New York, 10154; and Michael S. Marcus (Reg. No. 31,727), John E. Hoel (Reg. No. 26,279), and Stanley B. Green (Reg. No. 24,351) of Morgan & Finnegan, L.L.P., whose address is 1775 Eye Street, Suite 400, Washington, D.C. 20006.

- ☒ I hereby authorize the U.S. attorneys and/or agents named hereinabove to accept and follow instructions from Maria C.H. Lin as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and/or agents and me. In the event of a change in the person(s) from whom instructions may be taken I will so notify the U.S. attorneys and/or agents named hereinabove.

Full name of sole or first inventor:	<u>Jane Dixon</u>	
Inventor's signature*	<u></u>	<u>5/14/01</u> Date
Residence:	<u>27 Braemer Road, East Setauket, New York, 11733</u>	
Citizenship:	<u>Australia</u>	
Post Office Address:	<u>same as above</u>	
Full name of second inventor:	<u>David McKinnon</u>	
Inventor's signature*	<u></u>	<u>5/5/01</u> Date
Residence:	<u>27 Braemer Road, East Setauket, New York, 11733</u>	
Citizenship:	<u>Australia</u>	
Post Office Address:		

- ☐ ATTACHED IS ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR SIGNATURE BY THIRD AND SUBSEQUENT INVENTORS FORM.

*Before signing this declaration, each person signing must:

1. Review the declaration and verify the correctness of all information therein; and
2. Review the specification and the claims, including any amendments made to the claims.

After the declaration is signed, the specification and claims are not to be altered.

To the inventor(s):

The following are cited in or pertinent to the declaration attached to the accompanying application:

Title 37, Code of Federal Regulation, §1.56

Duty to disclose information material to patentability

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

Title 35, U.S. Code § 101

Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Title 35 U.S. Code § 102

Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent,
- (b) the invention was patented or described in a printed publication in this or foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Title 35, U.S. Code § 103

Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Title 35, U.S. Code § 112 (in part)

Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art

to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Title 35, U.S. Code, § 119

Benefit of earlier filing date in foreign country; right of priority

An application for patent for an invention filed in this country by any person who has, or whose legal representatives or assigns have, previously regularly filed an application for a patent for the same invention in a foreign country which affords similar privileges in the case of applications filed in the United States or to citizens of the United States, shall have the same effect as the same application would have if filed in this country on the date on which the application for patent for the same invention was first filed in such foreign country, if the application in this country is filed within twelve months from the earliest date on which such foreign application was filed; but no patent shall be granted on any application for patent for an invention which had been patented or described in a printed publication in any country more than one year before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country more than one year prior to such filing.

Title 35, U.S. Code, § 120

Benefit or earlier filing date in the United States

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application.

Please read carefully before signing the Declaration attached to the accompanying Application.

If you have any questions, please contact Morgan & Finnegan, L.L.P.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

U.S. APPLICATION NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/786108	MCKINNON	D 3875-4138US
INTERNATIONAL APPLICATION NO.		
PCT/US99/19902		
I.A. FILING DATE	PRIORITY DATE	
31 AUG 99	31 AUG 98	

MARIA C H LIN
MORGAN & FINNEGAN
345 PARK AVENUE
NEW YORK, NY 10154 0053

DATE MAILED: 16 APR 2001

**NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE
DISCLOSURES**

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- ☒ The application fails to comply with the requirements of 37 CFR 1.821-1.825.
- ☐ This application does not contain, a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- ☐ A copy of the "Sequence Listing" in computer readable format has not been submitted as required by 37 CFR 1.821(e).
- ☒ A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- ☐ The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ The paper copy or compact disc of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☒ Other: See Attachment

APPLICANT MUST PROVIDE:

- ☐ An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- ☐ An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- ☐ A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

**FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE
CALL:**

(703) 308-4216, for Rules interpretation,
(703) 308-4212, for CRF submission help,
(703) 287-0200, for PatentIn software help.

Pat Booker, Paralegal

Telephone: 703-305-3738

RECORDATION FORM COVER SHEET PATENTS ONLY

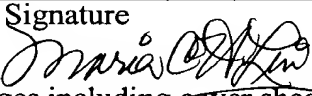
To The Honorable Commissioner of Patents and Trademarks:
Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Jane Dixon, 27 Braemer Rd, East Setauket, NY 11733</p> <p>David McKinnon, 27 Braemer Rd, East Setauket, NY 11733</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes</p>	<p>2. Name and address of receiving party(ies): Name: The Research Foundation of State University of New York Address: PO Box 9, Albany, New York, 12201-0009</p> <p>Additional name(s) & addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance: Assignment</p> <p>Execution Date(s): 6/5/01</p>	<p>4. Patent Application number(s) 09/786,108</p> <p>Execution Date(s): 2/27/01</p>
<p>5. Name and address of party to whom correspondence concerning document should be mailed: Name: Maria C.H. Lin Address: Morgan & Finnegan, LLP 345 Park Avenue New York, NY 10154</p>	<p>6. Total number of applications involved: 1</p> <p>7. Total fee (37 CFR 3.41): \$40.00</p> <p><input type="checkbox"/> A check in the amount of \$40.00 is enclosed.</p> <p><input checked="" type="checkbox"/> Charge to Deposit Account No.: <u>13-4500</u>, Order No. <u>3875-438US1</u>.</p> <p><input type="checkbox"/> Charge any deficiencies to Deposit Account <u>13-4500</u>, Order No. _____. (A duplicate copy of this sheet is enclosed)</p>

06/21/2001 ATRAM1 00000102 134500 09786108
01 FC:581 40.00 CH

DO NOT USE THIS SPACE

8. Statement and signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original document.

Name of Person Signing	Signature	Date:
Maria C.H. Lin		June 18, 2001
Reg. No. 29,323	Total no. of pages including cover sheet, attachments and document: 4	

DO NOT DETACH THIS PORTION

Mail documents to be recorded with required cover sheet information to:

Director of Patents
Box Assignments
Washington, DC 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, DC 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, DC 20503.

PATENT

Docket No. 3875-4138US1

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

Jane Dixon, 27 Braemer Road, East Setauket, New York, 11733

David McKinnon, 27 Braemer Road, East Setauket, New York, 11733

(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MAMMALIAN ELK POTASSIUM CHANNEL GENES

(title of discovery or invention)

- ☐ for which application for Letters Patent of the United States has been executed on even date herewith,
- ☒ for which application for Letters Patent of the United States has been filed on February 27, 2001, under Serial No. 09/786,108, and

WHEREAS:

The Research Foundation of State University of New York, PO Box 9, Albany, New York 12201-0009

(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said

discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

I, SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and behalf of the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

I, SAID, ASSIGNOR(S), hereby covenant that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over;

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE, its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns, and that if reissues of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will, at any time, when called up to do so by the ASSIGNEE, its successors, legal representatives, or assigns sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation and reissue applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discover in all countries, and without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

Assignor's

Jane
First Name: JaneE
Middle initial: EDixon
Last name: Dixon

Citizenship:

Australia

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 14 day of May, 2001.

STATE OF)

ss.: New YorkCOUNTY OF) Suffolk

On this 14 day of May, 2001, before me, the undersigned authority, personally appeared to me Jane E. Dixon

known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.

Agnes S. Haran
Notary Public

AGNES S. HARAN
NOTARY PUBLIC, State of New York
No. 01HA8040719
Qualified in Suffolk County
Commission Expires April 4, 2002

Assignor's

David
First Name: DavidMcKinnon
Middle initial:McKinnon
Last name: McKinnon

Citizenship:

Australia

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this day of

STATE OF)

ss.:

COUNTY OF)

On this 14 day of June, before me, the undersigned authority, personally appeared to me DAVID McKinnon

known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.

Dahl M. Capello
Notary Public

DAHL M. CAPELLO
Notary Public, State of New York
No. 4525287
Qualified in Suffolk County
Commission Expires 11/30/2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): David McKinnon and Jane Dixon

Group Art Unit: TBA

Serial No.: 09/786,108

Examiner: TBA

Filed: 2/27/01

For: Mammalian ELK Potassium Channel Genes

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STATEMENT UNDER 37 C.F.R. §§ 1.821(F) OR §1.825(b)

Sir:

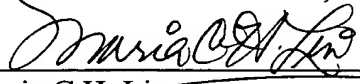
I hereby certify that:

☐ The paper Sequence Listing and computer readable form of the Sequence Listing submitted herewith are identical (37 C.F.R. §1.821(f)).

☒ The substitute paper Sequence Listing and substitute computer readable form of the Sequence Listing submitted herewith are identical. No new matter is included. (37 C.F.R. § 1.825(b)).

Respectfully submitted,

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Dated: June 18, 2001

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SEQUENCE LISTING

<110> DIXON, JANE
MCKINNON, DAVID

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Ser Leu Ala Leu Asp Glu Val Ser Ala Met Asp Asn His Val Ala Gly
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Ala Ser Thr Gly Ala Met His Pro Leu Arg Ser Gly Leu Leu Asn Ser
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Gln Ile Thr Leu Asn Phe Val Asp Leu Lys Gly Asp Pro Phe Leu Ala
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Asp Val Leu Pro Glu Tyr Lys Leu Gln Ala Pro Arg Ile His Arg Trp
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Thr Ile Leu His Tyr Ser Pro Phe Lys Ala Val Trp Asp Trp Leu Ile
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Phe Leu Leu Lys Glu Thr Glu Asp Gly Ser Gln Ala Pro Asp Cys Gly
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Tyr Ala Cys Gln Pro Leu Ala Val Val Asp Leu Leu Val Asp Ile Met
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 465 470 475 480

Asn	Glu	Glu	Val	Val	Ser	His	Pro	Gly	Arg	Ile	Ala	Val	His	Tyr	Phe	485	490	495
Lys	Gly	Trp	Phe	Leu	Ile	Asp	Met	Val	Ala	Ala	Ile	Pro	Phe	Asp	Leu	500	505	510
Leu	Ile	Phe	Gly	Ser	Gly	Ser	Glu	Glu	Leu	Ile	Gly	Leu	Leu	Lys	Thr	515	520	525
Ala	Arg	Leu	Leu	Arg	Leu	Val	Arg	Val	Ala	Arg	Lys	Leu	Asp	Arg	Tyr	530	535	540
Ser	Glu	Tyr	Gly	Ala	Ala	Val	Leu	Phe	Leu	Leu	Met	Cys	Thr	Phe	Ala	545	550	555
Leu	Ile	Ala	His	Trp	Leu	Ala	Cys	Ile	Trp	Tyr	Ala	Ile	Gly	Asn	Met	565	570	575
Glu	Gln	Pro	His	Met	Asp	Ser	His	Ile	Gly	Trp	Leu	His	Asn	Leu	Gly	580	585	590
Asp	Gln	Ile	Gly	Lys	Pro	Tyr	Asn	Ser	Ser	Gly	Leu	Gly	Gly	Pro	Ser	595	600	605
Ile	Lys	Asp	Lys	Tyr	Val	Thr	Ala	Leu	Tyr	Phe	Thr	Phe	Ser	Ser	Leu	610	615	620
Thr	Ser	Val	Gly	Phe	Gly	Asn	Val	Ser	Pro	Asn	Thr	Asn	Ser	Glu	Lys	625	630	635
Ile	Phe	Ser	Ile	Cys	Val	Met	Leu	Ile	Gly	Ser	Leu	Met	Tyr	Ala	Ser	645	650	655
Ile	Phe	Gly	Asn	Val	Ser	Ala	Ile	Ile	Gln	Arg	Leu	Tyr	Ser	Gly	Thr	660	665	670
Ala	Arg	Tyr	His	Thr	Gln	Met	Leu	Arg	Val	Arg	Glu	Phe	Ile	Arg	Phe	675	680	685
His	Gln	Ile	Pro	Asn	Pro	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Tyr	Phe	Gln	690	695	700
His	Ala	Trp	Ser	Tyr	Thr	Asn	Gly	Ile	Asp	Met	Asn	Ala	Val	Leu	Lys	705	710	715
Gly	Phe	Pro	Glu	Cys	Leu	Gln	Ala	Asp	Ile	Cys	Leu	His	Leu	Asn	Arg	725	730	735

Ser Leu Leu Gln His Cys Lys Pro Phe Arg Gly Ala Thr Lys Gly Cys
 740 745 750

Leu Arg Ala Leu Ala Met Lys Phe Lys Thr Thr His Ala Pro Pro Gly
 755 760 765

Asp Thr Leu Val His Ala Gly Asp Leu Leu Thr Ala Leu Tyr Phe Ile
 770 775 780

Ser Arg Gly Ser Ile Glu Ile Leu Arg Gly Asp Val Val Val Ala Ile
 785 790 795 800

Leu Gly Lys Asn Asp Ile Phe Gly Glu Pro Leu Asn Leu Tyr Ala Arg
 805 810 815

Pro Gly Lys Ser Asn Gly Asp Val Arg Ala Leu Thr Tyr Cys Asp Leu
 820 825 830

His Lys Ile His Arg Asp Asp Leu Leu Glu Val Leu Asp Met Tyr Pro
 835 840 845

Glu Phe Ser Asp His Phe Trp Ser Ser Leu Glu Ile Thr Phe Asn Leu
 850 855 860

Arg Asp Thr Asn Met Ile Pro Gly Ser Pro Ser Ser Ala Glu Leu Glu
 865 870 875 880

Ser Gly Phe Asn Arg Gln Arg Lys Arg Lys Leu Ser Phe Arg Arg Arg
 885 890 895

Thr Asp Lys Asp Thr Glu Gln Pro Gly Glu Val Ser Ala Leu Gly Gln
 900 905 910

Gly Pro Ala Arg Val Gly Pro Gly Pro Ser Cys Arg Gly Gln Pro Gly
 915 920 925

Gly Pro Trp Gly Glu Ser Pro Ser Ser Gly Pro Ser Ser Pro Glu Ser
 930 935 940

Ser Glu Asp Glu Gly Pro Gly Arg Ser Ser Ser Pro Leu Arg Leu Val
 945 950 955 960

Pro Phe Ser Ser Pro Arg Pro Pro Gly Asp Ser Pro Gly Gly Glu Pro
 965 970 975

Leu Thr Glu Asp Gly Glu Lys Ser Ser Asp Thr Cys Asn Pro Leu Ser
 980 985 990

Gly Ala Phe Ser Gly Val Ser Asn Ile Phe Ser Phe Trp Gly Asp Ser
 995 1000 1005

Arg Gly Arg Gln Tyr Gln Glu Leu Pro Arg Cys Pro Ala Pro Ala Pro
 1010 1015 1020

Ser Leu Leu Asn Ile Pro Leu Ser Ser Pro Gly Arg Arg Ser Arg Gly
 1025 1030 1035 1040

Asp Val Glu Ser Arg Leu Asp Ala Leu Gln Arg Gln Asp Asn Arg Leu
 1045 1050 1055

Glu Thr Arg Leu Ser Ala Asp Met Ala Thr Val Leu Gln Leu Leu Gln
 1060 1065 1070

Arg Gln Met Thr Leu Val Pro Pro Ala Tyr Ser Ala Val Thr Thr Pro
 1075 1080 1085

Gly Pro Gly Pro Thr Ser Thr Ser Pro Leu Leu Pro Val Gly Pro Val
 1090 1095 1100

Pro Thr Leu Thr Leu Asp Ser Leu Ser Gln Val Ser Gln Phe Val Ala
 1105 1110 1115 1120

Phe Glu Glu Leu Pro Ala Gly Ala Pro Glu Leu Pro Gln Asp Gly Pro
 1125 1130 1135

Thr Arg Arg Leu Ser Leu Pro Gly Gln Leu Gly Ala Leu Thr Ser Gln
 1140 1145 1150

Pro Leu His Arg His Gly Ser Asp Pro Gly Ser
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Gly Asn Ala Gln Ile Val Asp Trp Pro Ile Val Tyr Ser Asn Asp Gly		
35	40	45
Phe Cys Lys Leu Ser Gly Tyr His Arg Ala Glu Val Met Gln Lys Ser		
50	55	60
Ser Ala Cys Ser Phe Met Tyr Gly Glu Leu Thr Asp Lys Asp Thr Val		
65	70	75 80
Glu Lys Val Arg Gln Thr Phe Glu Asn Tyr Glu Met Asn Ser Phe Glu		
85	90	95
Ile Leu Met Tyr Lys Lys Asn Arg Thr Pro Val Trp Phe Phe Val Lys		
100	105	110
Ile Ala Pro Ile Arg Asn Glu Gln Asp Lys Val Val Leu Phe Leu Cys		
115	120	125
Thr Phe Ser Asp Ile Thr Ala Phe Lys Gln Pro Ile Lys Asp Asp Ser		
130	135	140
Cys Lys Gly Trp Gly Lys Phe Ala Arg Leu Thr Arg Ala Leu Thr Ser		
145	150	155 160
Ser Arg Gly Val Leu Gln Gln Leu Ala Pro Ser Val Gln Lys Gly Glu		
165	170	175
Asn Val His Lys His Ser Arg Leu Ala Glu Val Leu Gln Leu Gly Ser		
180	185	190
Asp Ile Leu Pro Gln Tyr Lys Gln Glu Ala Pro Lys Pro Pro His Ile		
195	200	205
Ile Leu His Tyr Cys Val Phe Lys Thr Thr Thr Trp Asp Trp Ile Ile		
210	215	220
Leu Ile Leu Thr Phe Tyr Thr Ala Ile Leu Val Pro Tyr Asn Val Ser		
225	230	235 240
Phe Lys Thr Arg Gln Asn Asn Val Ala Trp Leu Val Val Asp Ser Ile		
245	250	255
Val Asp Val Ile Phe Leu Val Asp Ile Val Leu Asn Phe His Thr Thr		
260	265	270
Phe Val Gly Pro Ala Gly Glu Val Ile Ser Asp Pro Lys Leu Ile Arg		

275	280	285
Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys Leu		
290	295	300
Pro Tyr Asp Val Ile Asn Ala Phe Glu Asn Val Asp Glu Gly Ile Ser		
305	310	315 320
Ser Leu Phe Ser Ser Leu Lys Val Val Arg Leu Leu Arg Leu Gly Arg		
	325	330 335
Val Ala Arg Lys Leu Asp His Tyr Ile Glu Tyr Gly Ala Ala Val Leu		
	340	345 350
Val Leu Leu Val Cys Val Phe Gly Leu Ala Ala His Trp Met Ala Cys		
	355	360 365
Ile Trp Tyr Ser Ile Gly Asp Tyr Glu Ile Phe Asp Glu Asp Thr Lys		
	370	375 380
Thr Ile Arg Asn Asn Ser Trp Leu Tyr Gln Leu Ala Leu Asp Ile Gly		
385	390	395 400
Thr Pro Tyr Gln Phe Asn Gly Ser Gly Ser Gly Lys Trp Glu Gly Gly		
	405	410 415
Pro Ser Lys Asn Ser Val Tyr Ile Ser Ser Leu Tyr Phe Thr Met Thr		
	420	425 430
Ser Leu Thr Ser Val Gly Phe Gly Asn Ile Ala Pro Ser Thr Asp Ile		
	435	440 445
Glu Lys Ile Phe Ala Val Ala Ile Met Met Ile Gly Ser Leu Leu Tyr		
	450	455 460
Ala Thr Ile Phe Gly Asn Val Thr Thr Ile Phe Gln Gln Met Tyr Ala		
465	470	475 480
Asn Thr Asn Arg Tyr His Glu Met Leu Asn Ser Val Arg Asp Phe Leu		
	485	490 495
Lys Leu Tyr Gln Val Pro Lys Gly Leu Ser Glu Arg Val Met Asp Tyr		
	500	505 510
Ile Val Ser Thr Trp Ser Met Ser Arg Gly Ile Asp Thr Lys Lys Val		
	515	520 525
Leu Gln Ile Cys Pro Lys Asp Asn Arg Ala Asp Ile Cys Val His Leu		

530	535	540
Asn Arg Lys Val Phe Lys Glu His Pro Ala Phe Arg Leu Ala Ser Asp 545	550	555 560
Gly Cys Leu Arg Ala Leu Ala Met Glu Phe Gln Thr Val His Cys Ala 565	570	575
Pro Gly Asp Leu Ile Tyr His Ala Gly Glu Asp Val Asp Ser Leu Cys 580	585	590
Phe Val Val Ser Gly Ser Leu Glu Val Ile Gln Asp Asp Glu Val Val 595	600	605
Ala Ile Leu Gly Lys Gly Asp Val Phe Gly Asp Val Phe Trp Lys Glu 610	615	620
Ala Thr Leu Ala Gln Ser Cys Ala Asn Val Arg Ala Leu Thr Tyr Cys 625	630	635 640
Asp Leu His Val Ile Lys Arg Asp Ala Leu Gln Lys Val Leu Glu Phe 645	650	655
Tyr Thr Ala Phe Ser His Ser Phe Ser Arg Asn Leu Ile Leu Thr Tyr 660	665	670
Asn Leu Arg Lys Arg Ile Val Phe Arg Lys Ile Ser Asp Val Lys Arg 675	680	685
Glu Glu Glu Glu Arg Met Lys Arg Lys Asn Glu Ala Pro Leu Ile Leu 690	695	700
Pro Pro Asp His Pro Val Arg Arg Leu Phe Gln Arg Phe Arg Gln Gln 705	710	715 720
Lys Glu Ala Arg Leu Ala Ala Glu Arg Gly Gly Arg Asp Leu Asp Asp 725	730	735
Leu Asp Val Glu Lys Gly Asn Ala Leu Thr Asp His Thr Ser Ala Asn 740	745	750
His Ser Leu Val Lys Ala Ser Val Val Thr Val Arg Glu Ser Pro Ala 755	760	765
Thr Pro Val Ser Phe Gln Ala Ala Ser Thr Ser Thr Val Ser Asp His 770	775	780
Ala Lys Leu His Ala Pro Gly Ser Glu Cys Leu Gly Pro Lys Ala Gly		

785		790		795		800
Gly Gly Asp Pro Ala Lys Arg Lys Gly Trp Ala Arg Phe Lys Asp Ala						
	805		810		815	
Cys Gly Lys Gly Glu Asp Trp Asn Lys Val Ser Lys Ala Glu Ser Met						
	820		825		830	
Glu Thr Leu Pro Glu Arg Thr Lys Ala Ser Gly Glu Ala Thr Leu Lys						
	835		840		845	
Lys Thr Asp Ser Cys Asp Ser Gly Ile Thr Lys Ser Asp Leu Arg Leu						
	850		855		860	
Asp Asn Val Gly Glu Ala Pro Ser Pro Gln Asp Arg Ser Pro Ile Leu						
	865		870		875	880
Ala Glu Val Lys His Ser Phe Tyr Pro Ile Pro Glu Gln Thr Leu Gln						
	885		890		895	
Ala Thr Val Leu Glu Val Lys His Glu Leu Lys Glu Asp Ile Lys Ala						
	900		905		910	
Leu Asn Ala Lys Met Thr Ser Ile Glu Lys Gln Leu Ser Glu Ile Leu						
	915		920		925	
Arg Ile Leu Met Ser Arg Gly Ser Ser Gln Ser Pro Gln Asp Ile Cys						
	930		935		940	
Glu Val Ser Arg Pro Gln Ser Pro Glu Ser Asp Arg Asp Ile Phe Gly						
	945		950		955	960
Ala Ser						

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